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U. S. DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE

1970 ANNUAL REPORT  
OF

# PLANT MATERIALS CENTER

COFFEEVILLE, MISSISSIPPI

PART 2



T. A. BOWN  
PLANT MATERIALS SPECIALIST

W. C. YOUNG  
REGIONAL  
PLANT MATERIALS SPECIALIST

W. L. HEARD  
STATE CONSERVATIONIST

B. B. BILLINGSLEY, JR.  
PLANT MANAGER

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PLANT MATERIALS CENTER  
COFFEEVILLE, MISSISSIPPI



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Organization of the  
Soil Conservation Service  
Plant Materials Center  
Coffeeville, Mississippi

Plant Materials Center Staff

B. B. Billingsley, Jr., . . . . .	Manager
J. H. Adams . . . . .	Supervisory Biological Technician
Lillian J. Stebbing . . . . .	Clerk Stenographer
Oscar L. Chandler . . . . .	Farm Equipment Operator
Fred W. Jackson . . . . .	Farm Equipment Operator
Jimmie Miller . . . . .	Nursery Worker
James Smith . . . . .	Nursery Worker





# INITIAL OBSERVATIONS -

## Codes:

A - Annual

P - Perennial

NG - No Germination

## GRASSES, LEGUMES, AND HERBACEOUS PLANTS

1 - Excellent

3 - Good

5 - Fair

7 - Poor

9 - Very Weak

10 - Winter Kill

B - Bunch

S - Sod

V - Vine

Species PI or MS Date Growth Seed. Leaf Seed Winter Matu- Plant  
Other No.:No.:Planted:Type :Vigor:Prod.:Prod.:Injury:rity :Height

*Adesmia angustifolia*

" "

" "

" bicolor

" microphylla

" muricata

" "

" "

" tenella

" "

" "

*Aeschynomene americana*

*Agropyron elongatum*

" "

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" "

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" "

" "

" "

" "

" "

PI 283159 3110 10-30-69 GD

PI 285103 3111 " GD

PI 285104 3112 " GD

PI 323407 3113 " NG

PI 285109 3114 " NG

PI 186274 3115 " NG

PI 238221 3116 " NG

PI 285110 3117 " NG

PI 285113 3119 " NG

PI 285112 3118 " NG

PI 285114 3120 " NG

3254 7-1-70 GL

3011 10-30-69 GL

PI 98526 3012 " GL

PI 150123 3013 " GL

BN 6096-62 3016 " GL

PI 119603 3017 " NG

PI 283164 3019 " GL

PI 297871 3020 " GL

PI 315352 3021 " GL

3023 " GL

PI 98526 3028 " GL

PI 179169 3029 " GL

PI 204383 3030 " GL

PI 205279 3031 " GL

PI 206622 3032 " GL

PI 206623 3033 " GL

Nov.

1 July

1 July

1 " 10"

1 " 10#

1 " 10"

1 " 12"

1 " 10"

1 " 14"

1 " 6"

1 Aug.

1 July

1 " 8"

1 " 6"

1 Aug.

1 July

3 9

7 9

9 9

7 7

7 5

7 7

7 5

7 7

7 5

7 9

7 5

7 9

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7 9

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7-1-70

10-30-69

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"

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PI 142012

PI 98526

PI 150123

BN 6096-62

PI 119603

PI 283164

PI 297871

PI 315352

PI 98526

PI 179169

PI 204383

PI 205279

PI 206622

PI 206623



## Codes:

GRASSES, LEGUMES, AND HERBACEOUS PLANTS				B - Bunch		
A - Annual	1 - Excellent	5 - Fair	9 - Very Weak	S - Sod		
P - Perennial	3 - Good	7 - Poor	10 - Winter Kill	V - Vine		
NG - No Germination						

Species	PI or MS	Date	Growth	Seed.	Leaf	Seed	Winter	Matu-	Plant
	Other No.:	No.:	Planted	Type	Vigor:	Prod.:	Proj.:	Injury:	riety
									Height
Agropyron elongatum	PI 206624	3034	10-30-69	GL	7	9	9	1	July 6"
"	PI 222958	3035	"	GL	5	5	5	1	" 8"
"	PI 222959	3036	"	GD	7	9			
"	PI 234708	3037	"	NG					
"	PI 249144	3038	"	GL	5	5	5	1	July 10"
"	PI 251143	3039	"	GL	5	5	5	1	" 6"
"	PI 255146	3040	"	GL	3	5	5	1	" 8"
"	PI 255148	3041	"	GL	3	7	5	1	" 6"
"	PI 255149	3042	"	GL	5	7	5	1	" 6"
"	PI 297873	2695	"	GL	7	9	9	1	" 8"
juncum	PI 261099	387	10-24-62	PB	5	7	7	1	June 18"
obtusiusculum	PI 297874	2696	10-30-69	GD	5	9	9	1	" 8"
pectiniforme	NC 402	3014	"	GL	5	7	9	1	July 10"
smithi	BN 12002-60	3015	"	GL	7	7	9	1	" 6"
"	BN 16229-64	3018	"	GL	5	7	9	1	" 12"
"	BN 6105-64	3022	"	GL	5	5	9	1	" 10"
"	A-13081	3024	"	GL	5	5	9	1	" 12"
"	C 27	3025	"	GL	5	7	9	1	" 10"
"	P 15614	3026	"	GL	5	7	9	1	" 10"
"	P 14897	3043	"	NG	5	7	9	1	" 10"
Agrostis palustris	3157	5-20-70	GL	5	7	9		-	8"
"	3158	"	GD						
Akebia quinata	3211	4-3-70	GL	5	5	9		-	2'
Andropogon annularis	2114	5-28-69	PB	5	5	3		5	July 5'
"	2157	5-11-66	PB	5	3	7		3	" 3'
"	2914	5-28-69	Disc.	1	1	3		10	Aug. 2 1/2'
"	2913	"	PB	3	3	3		1	" 2 1/2'
" caucasicus	PI 9982-59	139	5-19-61	PB	3	1	5	1	" 6'
" gerardi	BN 9703	253	5-10-62	PB	3	3		1	Sept. 4 1/2'



## GRASSES, LEGUMES, AND HERBACEOUS PLANTS

## Codes:

A - Annual

P - Perennial

NG - No Germination

1 - Excellent

3 - Good

5 - Fair

7 - Poor

9 - Very Weak

10 - Winter Kill

B - Bunch

S - Sod

V - Vine

Species	PI or Other No.:	MS No.:	Date Planted:	Growth Type:	Seed Vigor:	Leaf Prod.:	Seed Prod.:	Winter Injury:	Matu- rity:	Plant Height
Andropogon gerardi	NY 1145-1	942	3-22-65	PB	3	3	5	1	Sept.	6'
"	NY 1145-2	943	5-31-63	PB	5	5	5	1	Oct.	5'
"	AM 59	2244	5-11-66	PB	3	5	1	1	"	7½'
"	ischaemum	419	5-10-62	PB	3	5	5	3	Aug.	2½'
"	maritimus	2363	5-4-66	PB	3	3	7	1	Oct.	2'
"	hallii	2245	3-16-66	PB	5	3	5	1	Oct.	7½'
"	rhizomatus	F 1378	5-19-64	PB	3	7	7	3	Nov.	2'
"	scoparius	332	10-12-61	PB	1	1	3	1	Oct.	5'
"	"	333	10-13-61	PB	1	1	1	1	"	4½'
"	"	BN 4496	4-27-62	PB	1	3	3	1	Sept.	3½'
"	"	NC 62-15	4-11-63	PB	1	3	3	1	Oct.	3½'
"	" Sel. from 426-MS	1772	5-27-64	PB	1	3	5	1	Oct.	4½'
"	stolonifer	F 836	4-22-63	PB	3	5	7	3	Nov.	4'
"	"	F 2857	4-10-66	PB	3	9	9	3	Nov.	3½'
"	annulatus	PWT 586, Lot 2-63	5-11-66	PB	3	5	3	1	July	5½'
Apios americana	AM 692	3077	4-25-69	AB	3	3	5	1	Oct.	Prostrate
Arachis burkartii	PI 162801	955	4-25-69	AB	3	7	7	10	Oct	6"
"	glabrata	AM 1532	4-25-69	AB	3	5	5	10	Oct.	6"
"	" v. hagenbeckii	AM 1533	4-25-69	AB	3	5	7	10	Oct.	6"
"	"	AM 1533	4-25-69	AB	3	5	7	10	Oct	6"
"	monticola	PI 263393	5-7-65	AB	3	3	3	3	Nov.	18"
"	sp.,	AM 1292	4-25-69	AB	1	3	7	7	Oct.	6"
Atriplex atacamensis	PI 330655	3048	10-30-69	NG						
"	canescens	PWT 1042	"	NG						
"	"	BN 11911-64	"	NG						
"	"	PI 330657	3050	NG						
"	" v. linearis	PI 330658	3051	NG						
"	halimus	PI 330659	3052	NG						



GRASSES, LEGUMES, AND HERBACEOUS PLANTS

## Codes:

**A - Annual**

p - Perennial

NG - No Germination

B - Bunch  
S - Sod  
V - Vine

1 - Excellent      5 - Fair      9 - Very Weak

3 - Good 7 - Poor 9 - Very weak

Species	PI or	MS Date	Growth Seed.	Leaf Seed	Winter Matu-	Plant
	Other No. :	No.:Planted:	Type	Vigor	Prod.:Prod.:	Injury: rity :Height

Species	No.	Date	Locality	Collector	Host	Sex	Age
Atriplex lentiformis	PI 330661	3053	10-30-69	NG			
" leucoclada	PI 330662	3054	" "	NG			
" " v. turcomanica	PI 339807	3055	" "	NG			
" muelleria	PI 330663	3056	5-19-70	NG			
" nummularia	PI 330664	3057	" "	NG			
" polycarpa	PI 330665	3058	" "	NG			
" pseudocampaulata	PI 330666	3059	" "	NG			
" rosea	PI 330667	3060	" "	NG			
" sp.,	BN 15858-64	3061	" "	NG			
" "	PI 330670	3062	" "	NG			
" "	PI 330671	3063	" "	NG			
" verrucifera	PI 330697	3065	" "	NG			
" vesicaria	PI 330669	3064	" "	NG			
Belamcanda chinensis	AM 2356	2237	1-12-66	PB			
Bothriochloa intermedia v.							
" indica	PI 6580	2910	5-15-69	PB			
" indica	PMT 1062	2912	" "	PB			
" "	PMT 1065	2915	" "	PB			
Bouteloua curtipendula							
" "		2183	5-11-66	PB			
" "		2189	" "	PB			
Bromus erectus	PI 254881	805	10-29-63	Disc			
" "	PI 251106	807	" "	"			
" "	PI 253301	808	" "	"			
" "	PI 251107	809	" "	"			
" "	BN 12091-63	1896	10-22-65	"			
" inermis		2956	10-30-69	GL			
" "	PI 314071	2957	" "	GL			
" "	AM 1360	3181	12-4-69	GL			
" papovii	PI 283197	757	10-29-63	Disc.			





## Codes:

A - Annual

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## GRASSES, LEGUMES, AND HERBACEOUS PLANTS

1 - Excellent 5 - Fair 9 - Very Weak B - Bunch  
 3 - Good 7 - Poor 10 - Winter Kill S - Sod  
 V - Vine

Species	PI or Other No.	MS :No.	Date Planted	Growth Seed. Type	Leaf Prod.: Vigor	Seed Prod.: Prod.	Winter Injury	Matu- rity	Plant Height
<i>Bromus sitchensis</i>	PI 292257	1924	10-22-65	Discarded					
" <i>uniloides</i>	PI 292258	1925	11-26-65	"					
"	PI 316176	2697	10-30-69	GL	7	5	1	June	10"
"	PI 316177	2698	"	GL	5	3	1	"	10"
" <i>willdenowii</i>	PI 284107	1907	10-22-65	Discarded					
"	PI 284109	1908	"	"					
"	PI 284110	1909	"	"					
"	PI 284111	1910	"	"					
"	PI 284112	1911	"	"					
"	PI 284788	1912	"	"					
"	PI 164347	2699	10-30-69	GL	3	3	1	June	12"
<i>Carex</i> sp.,		931	5-1-63	Discarded					
"		932	"	"					
"		933	"	"					
<i>Centrosema virginianum</i>		2454	5-10-67	"					
<i>Chloris acicularis</i>	PI 23825	2958	5-15-69	"			10		
" <i>castilloniana</i>	PI 316200	2959	"	"			10		
" <i>cucullata</i>	PI 315683	2960	"	"			9		
" <i>myriostachya</i>	PI 20213	2985	"	"			10		
" <i>pectinata</i>	PI 238260	2986	"	"			10		
" <i>pynothrix</i>	PI 199955	2987	"	"			10		
" <i>roxburghiana</i>	PI 207632	2980	"	"			10		
" <i>truncata</i>	PI 279931	2988	"	"			10		
" <i>ventricosa</i>	PI 257692	2989	"	"			10		
<i>Coreopsis lanceolata</i>		2378	6-15-66	PB	3	5	1	June	2'
<i>Coronilla varia</i>		328	5-27-66	PB	3	1	1	July	3'
"		449	9-28-61	PB	3	1	1	"	3'



## GRASSES, LEGUMES, AND HERBACEOUS PLANTS

**Codes:**

A - Annual

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NG - No Germination

1 - Excellent

3 - Good

5 - Fair

7 - Poor

9 - Very Weak

70 - Winter Kilt

## B - Bunch

S - Sod

V - Vine

W-Plant.

y :Height

Species	PI or Other No.	Date Planted	MS No.	Growth Type	Seed	Leaf	Prod.	Winter Injury	Plant Height
Coronilla varia	PI 204871	5-27-66	485	PB	3	3	5	1	July
"	PI 20487	"	486	PB	3	3	5	1	"
"	PI 210365	"	487	PB	3	3	5	1	"
"	PI 228411	"	489	PB	3	3	5	1	"
"	PI 229968	"	491	PB	3	3	5	1	"
"	PI 238142	"	492	PB	3	3	5	1	"
"	PI 251808	"	493	PB	3	3	5	1	"
"	PI 253435	"	494	PB	3	3	5	1	"
"	PI 274010	"	495	PB	3	3	5	1	"
"	PI 274011	"	496	PB	3	3	5	1	"
"	PI 278698	"	497	PB	3	3	5	1	"
"	---	"	449	PB	3	1	5	1	"
"	---	"	513	PB	3	3	5	1	"
" parviflora	PI 283240	5-20-70	2873	NG					
Cynodon dactylon-Tufcote-		5-14-62		PS	3	1	9	1	Aug.
" -Tifdwarf		4-30-65		PS	3	3	9	1	"
" - local		7-5-66	2386	PS	3	1	9	1	"
" - Arkansas		5-24-67	2638	PS	5	5	9	1	Oct
" - No-Mow		7-10-67	2643	PS	3	5	9	1	Aug.
"	PI 325282	5-22-70	2990	NG					
"	PI 325283	"	2991	NG					
Cyperus sp.,		5-29-63	935	Discarded					
"		"	937	"					
Cytisus decumbens	PI 315686	10-30-69	3129	NG					
"	BN 1104262	"	3130	NG					
" mollis	PI 338638	"	3131	GL	5	7	9		12"
" nigricans	PI 331437	"	3132	NG					
"	BN 19186-68	"	3133	NG					
" ratisbonensis	BN 19187-68	"	3134	NG					
" scoparius		"	3121	NG					







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10 - Winter Kill

B - Bunch

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V - Vine

Species	PI or Other No.	No. Planted	MS Date	Growth	Seed.	Leaf	Seed	Winter	Matu-	Plant
				Type	Vigor	Prod.	Injury	Prod.	Prod.	Height
<i>Festuca ampla</i>	PI 238315	275	9-24-62	Discarded						
"	PI 240157	688	10-24-62	"						
"	arundinacea	537	10-5-62	"						
"	"	689	"	"						
"	"	690	10-24-64	"						
"	KY 31	691	"	"						
"	PI 264766	2262	10-27-67	"						
"	PI 302996	2329	10-27-67	PB	3	5	3	1	June	18"
"	PI 203728	2410	9-25-66	Discarded						
"	AM 1420	2563	10-27-67	"						
"	BN 15904-66	2656	10-27-67	PB	3	3	3	1	June	18"
"	"	2657	"	PB	3	7	5	1	"	16"
"	"	2658	"	PB	3	5	5	1	"	16"
"	"	2659	"	PB	3	5	5	1	"	16"
"	"	2707	10-30-69	GD						
"	PI 292602	2708	10-30-69	GD						
"	PI 292603	539	10-27-67	PB	3	3	3	1	June	18"
"	elatoir	538	"	PB	3	3	5	1	"	16"
"	F 3	1601	"	PB	3	1	3	1	"	18"
"	PI 270399	2411	9-25-66	Discarded						
"	NC 60-8	896	9-24-62	"						
"	NC 60-4	897	9-24-62	"						
"	"	3150	10-30-69	GL	5	5	9	1	Oct.	8"
Glycine ussuriensis	PI 163453	128	5-10-67	AB	3	3	3	10	Oct.	Vine
Helianthus maximiliani	PWT 852-65	2210	5-11-66	PB	3	3	3	1	Nov.	7'
"	"	2211	"	PB	3	3	3	1	"	7'
"	sp.,	2845	10-30-69	NG						
"	"	3262	"	NG						
Helictotrichon asperum	PI 271524	2763	"	NG						
"	hookeri	PI 234767	"	NG						
"	"	PI 234879	"	NG						





GRASSES, LEGUMES, AND HERBACEOUS PLANTS

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10 - Winter Kill

B - Bunch

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V - Vine

Species	PI or Other Number	MS No.	Date	Growth Seed. Type	Leaf Vigor	Seed Prod.	Winter Matu- rity	Plant Height
Hemarthria altissima	PI 299993	2916	5-13-68	PS	3	9	7	2'
"	PI 299039	2917	"	PS	3	5	10	18"
"	PI 299994	2918	"	PS	3	5	10	18"
Hemoracallis kwanso	PI 299995	2919	"	PS	3	9	9	
sp.,	F 3147	2586	4-5-67	PB	3	9	1	2½'
"	AM 1319	2164	9-3-65	PB	3	9	1	3'
"	AM 1281	2165	8-23-65	PB	3	9	1	3'
"	AM 1289	2177	10-11-65	PB	3	9	1	3½'
"		2178	10-11-65	PB	3	9	1	2½'
"		2338	3-4-66	PB	3	9	1	2½'
"		2339	3-10-66	PB	3	9	1	2½'
"		2438	10-25-66	PB	3	9	1	2½'
"	AM 1321	2439	10-25-66	PB	3	9	1	2½'
"	AM 1580	2562	3-6-67	PB	3	9	1	3'
"	AM 1999	2570	3-8-67	PB	3	9	1	3'
"	AM 2007	3209	4-3-70	B		7	1	2'
Indigofera pseudotinctoria	BN 10774	2952	5-19-70	B	3	7	1	2'
" leptosepala	PMT 1051	2679	5-24-68	PB	3	7	10	18"
Iris albispinitus	F 3808	2357	4-20-66	PB	3	7	1	2'
Iris sp., (White)		2234	1-12-66	PB	7	9	1	2½'
" (Blue)		2235	1-12-66	PB		5	1	2½'
" (White)		2236	"	PB		7	1	2½'
Kochia brevifolia	PI 330672	3067	5-15-69	AB	5	7	10	Oct. Nov. 30"
" indica	PI 330674	3069	"	AB	3	3	10	" " 6"
Leersia aquatica		3176	5-20-70	GL	5	5		1'
" oryzoides		2637	5-16-67	Discarded				
Lespedeza cuneata	BN 10506-58	119	4-11-65	PB	3	3	1	Sept. Prostrate
"	PI 246769	279	4-12-65	PB	3	5	1	Sept. 8"



## GRASSES, LEGUMES, AND HERBACEOUS PLANTS

Code:

-21025

A - Annual

P - Perennial

NG - No Germination

L - Excellent  
3 - Good5 - Fair  
7 - Poor9 - Very Weak  
10 - Winter KillB - Bunch  
S - Sod  
V - Vine

Species	PI or Other MS Number	Date :Planted	Growth		Seed :Type	Leaf :Prod.	Seed :Prod.	Winter :Injury	Mature Plant :Height
			No.						
<i>Lespedeza cuneata</i> ,	BN 1666-65	2531	5-18-67	PB	5	5	5	1	Nov. 8"
"	PI 310409	2535	"	PB	5	5	3	1	Sept. 2 1/2'
"	NC Syn. # 2	2584	"	PB	3	3	5	1	Oct 2'
"	AM 2054	2585	"	PB	3	3	5	1	Oct 2 1/2'
" intermixta	PI 246770	280	4-12-65	PB	3	7	5	1	Oct Prostrate
" japonica Sel.	PI 90664)	1643	3-17-64	PB	3	5	7	1	" 3'
"	VA 70	1850	2-2-65	PB	3	1	7	1	" 3'
"	AM 816	2503	3-8-68	PB	3	5	7	1	Aug. 3'
"	BN 2537	2537	5-18-67	PB	3	7	7	1	" 2'
" maximowiczii	BN 2230-65	2537	5-18-67	PB	3	5	7	1	Sept. 3'
" pilosa	PI 246771	282	5-13-63	PB	3	5	5	1	Oct. 1'
" procumbens	NC 63-8	1609	4-17-64	PB	9	7	5	1	" 8"
"	NC 64-3	1646	"	PB	9	7	5	1	" 8"
"		230	5-1-64	PB	Died				
" sericea		2146	5-11-67	PB	1	3	3		" 3'
" virgata	PI 218004	126	4-12-65	PB	3	5	3	1	" 12"
" virginicus	BN 10762	3166	5-20-70	veg	Died				
<i>Liriope graminifolia</i>	BN 10762	2577	3-14-67	PS	3	1	3	1	Oct. 12"
" muscari v. variegata		2588	5-67	PS	3	3	5	1	" 12"
" sp.,	BN 10762	2578	3-14-67	PS	3	3	5	1	" 12"
<i>Lupinus angustifolius</i>	AM 2390	3007	10-30-69	GL	3	3	5	1	June 2'
<i>Miscanthus sinensis</i>		2158	7-1-65	PB	5	1	9	1	Sept. 6'
"		2159	"	PB	3	1	3	1	" 6'
<i>Oryzopsis miliacea</i>	PI 330678	3073	5-20-70	Died					
" holciformis	PI 330716	3072	5-15-70	"					
<i>Panicum amarulum</i>		2191	5-11-66	PS	3	1	3	1	Sept. 3'
" antidotale	PI 275096	380	4-19-66	Died					
"	PI 300034	2726	5-24-68	Discarded				9	
" claudestinum		1737	4-19-64	PB	7	3	5	1	June 3'
"	NC 65-1	2201	5-11-66	PB	5	3	5	1	" 3'







## Code:

A - Annual  
P - Perennial  
NG - No Germination

## GRASSES, LEGUMES, AND HERBACEOUS PLANTS

1 - Excellent 5 - Fair 9 - Very Weak  
3 - Good 7 - Poor 10 - Winter Kill

B - Bunch  
S - Sod  
V - Vine

Species	PI or Other No.	MS No.	Date Planted	Growth Type	Seed: Vigor:Prod.	Leaf: Prod.:Injury:	Winter: Maturity:	Plant Height
Paspalum cymorrhizon	PI 310070	3214	4-17-70	GL	5	5	5	2'
"	PI 310061	3251	"	"	3	5	5	2'
"	BN 16632-65	3252	"	"	3	3	5	2'
"	BN 16638-69	3253	"	"	3	5	5	2'
" distichum	NC 69-15	3123	6-23-69	"	3	3	5	12"
"	PMT 2215	3152	5-20-70	"	3	5	5	18"
"	PMT 2216	3153	"	"	3	3	3	18"
"	PMT 2227	3154	"	"	3	5	7	18"
"	PMT 2228	3155	"	"	3	3	5	18"
"		3175	5-22-70	"	3	3	5	18"
"		3178	5-20-70	"	3	3	5	18"
"		3182	"	"	3	1	3	18"
"		3149	8-29-69	"	3	5	1	1'
" minus		3263	8-27-70	"	5	7	7	8"
" nicorae	PI 276248	904	5-15-69	PS	3	9	7	18"
"	PI 202044	906	"	Discarded				
"	PI 209983	1000	"	"				10
"	PI 283020	1001	"	"				10
"	PI 304003	3080	"	"				9
"	PI 304004	3081	"	"				10
"	PI 310128	3082	"	"				10
"	PI 310129	3083	"	"				10
"	PI 310130	3084	"	"				10
"	PI 310131	3085	"	"				10
"	PI 310132	2086	"	"				10
"	PI 310133	3087	"	"				10
"	PI 310134	3088	"	"				10
"	PI 310135	3089	"	"				10
" notatum		131	5-5-65	PB	3	3	5	Aug.
"		510	"	PB	3	7	5	July
"								1 1/2'
"								2'





## Code:

## GRASSES, LEGUMES, AND HERBACEOUS PLANTS

#-21025 6-71

Species	A - Annual P - Perennial NG - No Germination	PI or Other No.	MS :No.	Date Planted	Growth Type	Seed.:Leaf Prod. Vigor	Seed Prod.	9 - Very Weak 10 - Winter Kill	B - Bunch S - Sod V - Vine	Winter:Matu- Injury:ity	Plant Height
Paspalum notatum			902	5-5-65	PS	3	3	5	7	July	1/2'
"	"		903	"	PS	3	3	5	7	"	1/2'
"	"	BN 11573-61	1880	"	PS	3	3	5	7	"	1 1/2'
"	"	PI 276251	2023	"	Discarded				10		
"	"		2348	3-28-66	"				10		
"	"		2405	5-22-67	"				10		
"	"		2646	5-24-68	"				10		
"	"	NC 65-5	2758	5-24-67	"				10		
"	"	Same as MS 2405	2759	"	"				10		
"	"	PI 337564	3003	5-15-69	"				10		
"	"	PI 331156	3005	"	"				10		
plicatulum		PI 276253	2031	"	"				10		
"	"	PI 299070	3091	"	"				10		
"	"	PI 304025	3092	"	"				10		
"	"	PI 304027	3093	"	"				10		
"	"	PI 304029	3094	"	"				10		
"	"	PI 304030	3095	"	"				10		
"	"	PI 304031	3096	"	"				10		
"	"	PI 304032	3097	"	"				10		
"	"	PI 304035	3098	"	"				10		
"	"	PI 304036	3099	"	"				10		
"	"		3100	"	"				10		
"	"	PI 310234	3101	"	"				10		
"	"	PI 310239	3102	"	"				10		
"	"	PI 310244	3103	"	"				10		
"	"	PI 310246	3104	"	"				10		
"	"	PI 310247	3105	"	"				10		
"	"	PI 310287	3106	"	"				10		
"	"	PI 310291	3107	"	"				10		
"	"	PI 312896	3108	"	"				10		



GRASSES, LEGUMES, AND HERBACEOUS PLANTS

Code:

A - Annual

P - Perennial

NG - No Germination

1 - Excellent

3 - Good

5 - Fair

7 - Poor

9 - Very Weak

10 - Winter Kill

B - Bunch

S - Sod

V - Vine

Species	PI or Other No.	MS No.	Date Planted	Growth Type	Seed Vigor	Leaf Prod.	Seed Prod.	Winter Injury	Plant Maturity	Plant Height
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Paspalum plicatulum	PI 339896	3140	5-15-70		3	1	5		Sept.	2'
"	PI 339897	3141	5-20-70		5	1	7		"	2'
" quadifarium	PI 161886	2033	5-5-65	PB	5	1	3	1	July	4'
"	PI 283022	2034	"	PB	3	3	3	3	"	4'
" sp.,	PI 347536	3192	5-15-70	PB	3	3	3	1	Sept.	1'
" vaginatum	PI 284500	2061	5-5-65	Discarded						
"		3147	8-26-69	Veg. DIED						
"		3247	5-20-70		3	3	7		Aug.	18"
"		3248	5-22-70		3	5	3		"	18"
"		3249	"		3	3	5		"	18"
Pennisetum alopecuroides	BN 339-59	352	5-1-64	B	3	3	5	1	Sept.	3 1/2'
" sp.,	PI 271603	484	4-14-68	S	3	7	7	7	July	3 1/2'
"	PI 315868	2728	5-24-68	S	3	3	7	3	Aug.	3'
"	PI 304751	3122	5-15-69	S	Discarded			10		
"	Hyb. # 68-12	3193	"	S	3	3	3		July	3'
"	" # 69-1	3194	"	S	3	3	5		"	3'
"	" # 69-2	3195	"	S	3	3	5		"	3'
"	" # 69-3	3196	"	S	3	3	5		"	3'
"	" # 69-4	3197	"	S	3	3	5		"	3'
"	" # 69-5	3198	"	S	3	3	5		"	3'
"	" # 69-6	3199	"	S	3	3	5		"	3'
"	" # 69-19	3200	"	S	3	3	7		"	3'
"	" # 69-21	3201	"	S	3	3	7		"	3'
"	" # 69-47	3202	"	S	3	3	5		"	3'
"	" # 69-69	3203	"	S	5	5	5		"	3 1/2'
"	" # 69-88	3204	"	S	3	1	5		"	3 1/2'
"	" # 69-91	3205	"	S	3	3	5		"	3 1/2'
"	" # 69-101	3206	"	S	3	5	5		"	3'
"	" # 69-101	3206	"	S	3	3	5		"	3'
" spicatum	PI 337999	2978	"	S	1	1	7	10	Sept	7'
Phalaris x arundinacea	BN 12103-63	1897	11-9-65	PS	3	3	5	1	June	1 1/2'
" arundinacea	F 1208	540	10-29-64	PS	1	1	7	1	July	1 1/2'



Code:

A - Annual

P - Perennial

NG - No Germination

**U - Excellent**

3 - Good

211

7 - Poor

o Wave Walk

70 - Winter Kill

## B - Bunch

S - Sod

V - Vine

Species	PI or Other	MS No.:	Date Planted:	Growth Type:	Seed Vigor	Leaf Prod.:	Seed Prod.:	Winter Injury:	Plant Height
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Species	PI	297362	2840	4-16-68	PS	5	9	1	June
Phalaris arundinacea									
" tuberosa v. hirtiglumis			2641	5-24-68	PS	5	3	1	July
Phlox adsurgens			2373	5-26-66	PB	3	3	1	June
Phragmites communis	PMK 1271		3109	4-30-69	PS	3-	9	1	
Foa angustifolia	PI 251251	3241		5-19-70	NG				
" australis	PI 209102	3242		5-19-70	NG				
" glaucantha	BN 9319-64	2119		10-22-65	Discarded				
" iridifolia	PI 285254	3243		5-19-70	NG				
" ligularis	PI 284255	3244		5-19-70	NG				
" pilcomay	PI 337592	3245		"	NG				
" pratensis	AM 1391	3008		5-19-70	NG				
Polygonum cuspidatum compactum	NY 1119	3246		5-20-70		7	9	10	Aug.
Psoralea adscendens	PI 238351	2804		5-23-68	Discarded				
" bituminosa	PI 283969	780		5-9-63	PB	3	5	3	
" eriantha	PI 287922	2888		5-23-68	Discarded			10	
" terax	PI 246747	2884		"	"			10	
Rhynchosia minima		2943		5-19-70	NG				
Setaria argentina	PI 186965	2066		5-26-66	Discarded				
" gerrardi	PI 208303	2073		5-10-67	"			10	
" italica	PI 230136	2081		5-26-66	"			10	
" macrostachya	PI 217229	2082		"	"			10	
" "	PI 229129	2083		"	"			10	
" "	PI 229131	2084		"	"			10	
" neglecta	PI 300110	2548		5-10-67	"				
" sphacelata	PI 284477	2848		5-23-68	"				
" "	PI 280125	2890		5-23-68	"			10	
" "	PI 314881	2894		"	"			10	
" "	PI 314882	2895		"	"			9	
Sorghastrum nutans		145		5-19-61	PB	3	8	1	Oct.
" "		228		"	PB	3	5	1	"
" "		1746		5-27-68	PB	3	5	1	"

[illegible]



## Code:

A - Annual

P - Perennial

NG - No Germination

## GRASSES, LEGUMES, AND HERBACEOUS PLANTS

B - Bunch

S - Sod

V - Vine

1 - Excellent      5 - Fair      9 - Very Weak      10 - Winter Kill

3 - Good      7 - Poor

Species	PI or Other No. :No.	MS :No.	Date :Planted:	Growth:Seed.:Leaf :Winter:Matu-:Plant			
				Type	Vigor:Prod.:Injury:ri ty	Height	

## Sorghastrum nutans

"		1747	5-27-64	PB	3	5	3	1	Oct.	4'
"		1748	"	PB	3	5	5	1	"	4'
"		2227	5-11-66	PB	5	3	3	1	"	3'
"	AM 58	2462	5-18-67	PB	7	3	1	1	"	4'
"	AM 763	2463	"	PB	3	5	5	1	Aug.	18"
"	AM 764	2464	"	PB	3	3	5	1	Sept.	2½'
"	AM 765	2465	"	PB	5	3	5	1	"	3'
"	AM 766	2466	"	PB	5	3	3	1	"	3½'
"	AM 773	2467	"	PB	3	3	5	1	"	3½'
"	AM 1323	2468	"	PB	3	3	3	1	Oct.	4½'
"	AM 1386	2469	"	PB	5	5	3	1	"	4½'
"	AM 1387	2471	"	PB	3	3	3	1	"	3'
"	AM 1388	2472	"	PB	5	3	3	1	"	3½'
"	AM 1760	2473	"	PB	3	3	3	1	"	3½'
"		2477	"	PB	3	5	3	1	"	2½'
"		2478	"	PB	5	3	3	1	"	3½'
"		2479	"	PB	5	5	3	1	"	3'
"		2482	"	PB	3	3	3	1	"	4'
"		2558	"	PB	7	3	3	1	"	3½'

## Spartina patens

"	F 3806	2360	4-20-66	Discarded	3	3	7	1	Aug	5'
"	pectinata	2174	11-10-65	P	5	3	8	1	"	4'

## Sporobolus airoides

"	PMT 155	2218	5-11-66	PB	3	5	3	1	June	2½'
"	PMT 207	2219	"	PB	5	5	3	1	"	2½'
"	PMT 228	2220	"	PB	3	5	5	1	"	2'
"	PMT 270	2221	"	PB	3	5	5	1	"	2½'
"	PMT 326	2222	"	PB	3	3	3	1	July	2'
"	PMT 382	2223	"	PB	3	5	3	1	June	2½'
"	PMT 624	2225	"	PB	3	7	5	1	"	2½'
"	PMT 812	2226	"	PB	3	1	3	1	July	3'





## Node:

4-21025 6-71

Node:

B - Bunch  
S - Sod  
V - Vine



## Code:

A - Annual  
P - Perennial  
NG - No Germination

## GRASSES, LEGUMES, AND HERBACEOUS PLANTS

1 - Excellent 5 - Fair 9 - Very Weak B - Bunch  
3 - Good 7 - Poor 10 - Winter Kill S - Sod  
V - Vine

Species PI or MS Date Growth Seed Leaf Seed Winter Matu-Plant  
Other No. :No. :Planted:Type :Vigor:Prod.:Injury:riety:Height

*Zizania texana* 3151 9-8-69 Veg. Died  
" *aquatica* 3173 5-20-70 NG  
*Zizaniopsis miliacea* 949 6-10-63 PB 3 9 1 Sept-Oct. 2'  
" " 3125 5-20-70 GL 5 9 2'  
" " 3126 " GL 5 9 2'  
" " 3127 " GL 5 9 2'  
" " 3128 " GL 5 9 2'  
" " 3183 " GL 5 9 1'  
" " 3190 3-6-70 Veg. L. 5 9 Sept-Oct. 2'  
" " 3191 3-13-70 " 5 9 2'  
*Zoysia "Emerald"* 346 6-1-62 PS )  
" *japonica* 340 10-31-61 PS )  
" " 341 " PS )  
" " 342 " PS )  
" " 526 5-15-62 PS )  
" " 2841 4-15-68 PS )  
" *matrella* 343 10-31-61 PS )  
" " 344 10-31-61 )  
" " 345 " )  
" sp., M-1 2620 4-20-67 )

)- Holding Block



## Codes: Winter and Insect Injury

## SHRUBS AND TREES

1: 0.....29% -  
3:-21....40%5: 41.....60%  
7: 61.....80%

9: 81.....100%

Species	PI or Other Number	MS No.	Date Planted	Deci- dious	Ever- green	Insect Injury	Winter Injury	Matu- rity	Plnt Hgt.: Wdth
Akebia quinata	Mi 1100	3211	4-3-70	x		1		1'	4'
Alnus glutinosa	Mi 823	2583	3-17-67	x		3	1	Oct.	9' 6'
" mayerii	PI 317356	2902	4-29-68	x		1	1		1' 8"
" rubra		3207	3-18-70	x		1	1	None	2'
" rugosa		29368	1-15-69	x		1	1		2'
Amorpha fruticosa	PMT 2298	3189	5-19-70	x		1	9		2'
Ampelopsis brevipedunculata	NC 67-14	2665	3-18-68	x		1	1	Oct.	15' 6-8'
Aronia arbutifolia		2450	11-18-66	x		1	1	Nov.	4'
Berberis julianae	BN 15905	2117	3-8-65		x	1	1	"	2 1/2'
" mentoriensis		2687	3-29-67		x	1	1	"	3 1/2'
Callicarpa americana		2933	Jan. 69	x		1	1	None	2'
Castanea alnifolia		4	11-19-60	x		1	1	Sept.	10'
" dentata		2167	9-28-65	x		1	5	None	2'
" molissima	BN 8299	19	1-1-61	x		1	1	Sept.	15'
" "	R8 T15	20	1-1-61	x		1	1	"	24'
" "	R6 T16	21	1-1-61	x		1	1	"	24'
" "	R5-T9	22	1-1-61	x		1	1	"	24'
" "	R8-T16	23	1-1-61	x		1	1	"	24'
" "	R3-T21	24	1-1-61	x		1	1	"	24'
" "	S-876	25	1-1-61	x		1	1	"	25'
" ozarkensis		3161	12-4-69	NG					
" <del>pauciflora</del>	AM 12	2681	1-10-68	x		1	1	None	3'
" sp.,	PI 58602	157	3-29-61	x		1	1	Sept.	15'
" "	ML 5604	2428	10-5-66	x		1	1	None	18"
" "	ML 5604	2429	10-5-66	x		1	1	"	3'
" "	ML 5603	2430	"	x		1	1	"	3 1/2'
Castanopsis sp. scherophylla	PI 95630	359	12-4-69	NG					
" chrysophylla	PI 244348	2949	12-4-69	NG					
" sp.,		2951	Fall '69	NG					
" schlerophylla	PI 58394	3171	12-4-69		x	1	1	None	6"
Cercis canadensis		3179	12-3-69	x		1	1	None	3'
Cornus florida		2572	3-13-67	x		1	1	"	5'



## SHRUBS AND TREES

Code:

Winter and Insect Injury

1: 0 ... 20%

3: 21 ... 40%

5: 41 ... 60%

7: 61 ... 80%

9: 81 ... 100%

Species	PI or Other Number	MS No.	Date Planted	Deci- dious	Ever- green	Insect Injury	Winter Injury	Matu- rity	Plnt Hgt.	Width
<i>Cornus mas</i>	BN 14626	2573	3-18-67	x		1	1	None	2'	1'
<i>Cornus officinalis</i>	BN 14627	2574	3-13-67	x		1	1	"	2'	1'
<i>Corylus americana</i>		138	2-3-61	x		1	1	Oct.	5'	5'
"		337	10-19-61	x		1	1	"	5'	3'
<i>Cotoneaster racemiflora</i>	PI 297597	2936A	1-- 69	x		1	1	None	2'	2'
<i>Crataegus</i> sp.,		2202	11-24-65	x		1	1	"	2½'	2'
"	AM 2302	2460	12-1-66	x		1	1	"	2½'	1½'
"		2571	1-15-69	x		1	1	None	1'	8"
<i>Cunninghamia lanceolata</i>		1848	11-25-64		x	1	1	"	2½'	2½'
<i>Elaeagnus multiflora</i>	NC 69-6	2231	1-11-66	x		1	1	Sept.	7'	5'
"		3047	4--69 GD							
"	BN 11373	368	2-2-62	x		1	1	Sept.	10'	11'
"	BN 11374	427	3-19-62	x		1	1	Aug.	14'	12'
"	BN 11385	428	"	x		1	1	Sept.	11'	11'
"	BN 11387	429	"	x		1	1	"	14'	13'
"	BN 11426	430	12-17-65	x		1	1	"	11'	11'
"	BN 12090	431	3-19-62	x		1	1	Aug.	9'	8'
"	BN 12090	432	"	x		1	1	"	13'	13'
"	BN 13459-62	1722	3-16-64	x		1	1	"	10'	10'
"	BN 13460-64	1723	"	x		1	1	"	10'	10'
"	NY 2409	2246	2-9-66	x		1	1	"	9'	8'
<i>Euonymus bungeanus</i>	FM-0-38	2945	10--69	NG				None	Prostrate	
"	PI 295073	2379	6-23-66		x	1	1	"	1'	6"
"	AM 1880	2490	1-30-67		x	1	1	"	6"	6"
<i>Eurya crenatifolia</i>	PI 324975	3215	4-23-70							
<i>Gleditsia tricanthos</i>	AM 2401	3187		x					1'	1'
<i>Hydrangea integrifolia</i>	PI 985	3216	4-20-70	x		1	1	"	1'	6"
"	PI 226119	3217	"	DIED						





1: 0 ...20%  
3: 21...40%

5: 41 .... 60%  
7: 61 .... 80%

9: 81 ....100%

Species	PI or Other Number	MS No.	Date Planted:	Deci- dious:	Ever- green:	Insect Injury:	Winter Injury:	Plant Height:	Plant Width
<i>Hypericum galioides</i>		2351	4-6-66	x		1	1	2½'	2'
" sp.,		3218	4-20-70	x		1	1	3'	3'
<i>Ilex cassine</i>	PI 254592	3009	3-25-69	x		1	1	3'	2'
<i>Ilex montana v. macropoda</i>	PI 316703	3010	"	x		1	1	4'	1'
<i>Ilex vomitoria</i>	NC 68-8	2946	Nov. 69	NG					
<i>Juglans nigra</i>		2937	" '68	x		1	1	18"	..
"		2938	"	x		1		18"	..
<i>Laurus nobilis</i>		3045	12-4-69	NG					
<i>Libocedrus decurrens</i>		3168	"		x	1		1'	...
<i>Leucaena retusa</i>	AM 1601	2682	3-15-68	x	DIED	1	1	1'	6"
"	PMT 1387	2954	12-3-69	x					
<i>Lithocarpus sp.,</i>	AM 2373	2948	12-4-69	NG					
<i>Lonicera maackii</i>		2205	11-4-65	x		1	1	3½'	2½'
"		2461	12-22-66	x		1	1	3'	3'
"	BN 8318	2161	3-6-68	x		1	1	3'	3'
"		2668	67	x					
" sp.,		2166	9-24-65	x		1	1	7'	6'
<i>Malus baccata</i>	PI 99907	151	'61	x		1	1	16'	16'
" hupehensis	PI 122586	150	3-13-61	x		1	1	18'	13'
" sp.,		385	2-9-62	x		1	1	24'	14'
" spectabilis	AM 259	365	2-2-62	x		1	1	9'	8'
<i>Metasequoia glyptostroboides</i>	PI 286608	1729	4-13-64		x	1	1	3½'	2'
<i>Pachistima canbyi</i>	BN 13500	2580	3-13-67	DIED					
<i>Photinia villosa sinica</i>	MI 5852	2426	11-18-66	x		1	1	5'	3'
<i>Phyllostachys bisetii</i>	PI 143540	499	4-9-62		x	1	1	25'	25'
" meyerii	PI 116768	498	"		x	1	1	25'	30'
" sp.,	AM 315	500	"		x	1	1		
"		3174	5-20-70	NG					



## SHRUBS AND TREES

Codes: Winter and Insect Injury

1: 0 ... 20%

3: 21... 40%

5: 41 ... 60%

7: 61 ... 80%

9: 81... 100%

Species	PI or Other Number	MS No.	Date Planted	Deci- dious	Ever- green	Insect Injury	Winter Injury	Plant Height	Plant Width
<i>Pinus koraiensis</i>	PI 316977	2903	4-29-68				1	1'	
"	PI 317255	2904	"			x	1	1'	
"	PI 317256	2905	"			x	1	1'	
" <i>ponderosa</i>	Lot BJ	3169	12-3-69			x	1	6"	
"	" OO	3170	"			x	1	6"	
" <i>sylvestris</i>	PI 343945	3142	"	NG			1		
"	PI 343946	3143	"			x	1	6"	
"	PI 343947	3144	"	NG			1		
"	PI 343948	3145	"			x	1	6"	
"	PI 343949	3146	"			x	1	6"	
" <i>thunbergi</i>	1873	2-4-65				x	3	4'	3'
<i>Pistacia atlantica</i>	PI 276702	2501	2-2-67	DIED					
"	PI 276701	2500	"	"					
"	PI 276703	2502	"	"					
" <i>chinensis</i>	PI 21970	2182	12-17-65	x			1	None	2'
<i>Pithecellobium tobiro</i>	NC 67-23	2678	2-20-68			x	1	"	2'
<i>Prunus caroliniana</i>	AM 2031	2684	1-10-68			x	1	"	-
"		2947	1-15-69			x	1	"	1'
"		2693	3-5-68			x	1	"	3'
"		3186	12-11-70	NG			1	"	
<i>Populus simoni</i>	KY 725	3210	Apr. '70	x			1	"	3'
<i>Pterocarya stenoptera</i>	PI 61938	3188	"	x			1	18"	12"
<i>Pyracantha coccinea</i>	AM 170	366	2-9-62			x	1	None	10'
"	PI 203240	367	"			x	1	None	10'
" sp.,		2206	11-24-55			x	1	None	10'
"		2670	3-5-68			x	2	Nov.	4'
" <i>coccinea</i>		819	1-30-63			x	3	Nov.	6'
<i>Quercus acutissima</i>	AM 264	3	2-2-62	x			1	Nov.	4'
"	PI 168939	2	11-29-61	x			1	Sept.	10'
"	PI 76481	3163	10-15-69	x			1	None	8'
"		335	10-12-61	x			1	"	2'
" <i>arkansana</i>							1	"	10'



## SHRUBS AND TREES

Codes: Winter and Insect Injury

3: 21 ... 40%

7: 61 ... 80%

5: 41 ... 60%

9: 81 ... 100%

1: 0 ... 20%

Species	PI or MS	Other No.	No.	Date	Deci- dious	Ever- green	Insect Injury	Winter Seed Plnt.	Plnt.
<i>Quercus imbricaria</i>	335			10-12-61	x			1	7'
" <i>montana</i>	AM 475	1648		2-13-64	x			1	"
" <i>myrsinaefolia</i>	PI 74222	6		12-19-60		x		1	"
" "	PI 74227	2433		1/11/66		x		1	"
" <i>pumila</i>	AM 305			2-2-62	x			1	Oct.
" "	AM 306	371		2-2-62	x			1	Oct
" "	AM 262	372		2-2-62	x			1	"
" "	AM 171	373		2-2-62	x			1	"
" "	SC 57-30	1851		1-12-65	x			1	"
" "	SC 57-31	1852		12-12-65	x			1	"
" "	SC 57-32	1853		1-12-65	x			1	"
" "	SC 57-33	1854		1-12-65	x			1	"
" "	SC 57-34	1855		1-12-65	x			1	"
" "	SC 57-35	1856		"	x			1	Oct.
" "	1857			"	x			1	"
" "	AM 310	2240		2-7-66	x			1	"
" "	AM 171	2685		3-15-68	x			1	"
" "	AM 1552	2686		3-15-68	x			1	"
" <i>virginiana</i>	NC 68-20	2939		11-4-68	Germ. & Died			1	None
" "	NC 68-21	2940		11-4-68	"			1	
<i>Robinia hispida</i>	NY 3018	2488		1-23-67	x			1	June
" <i>pseudacacia</i>	PI 257022	2906		11-26-68	x			1	None
<i>Rosa eglanteria</i>	AM 1553	2459		12-1-66	x			1	"
<i>Rubus parvifolius</i>	Mi 4879	3212		4-2-70	x			1	V-Prostrate
<i>Salix acutifolia</i>	814			2-18-63	x			1	7' 5'
" <i>alba</i>	BN 13692	852		3-27-63	x			1	3' 3'
" <i>americana androgyna</i>	BN 14863	1955		2-13-65	x			1	None
" <i>bicolor</i>	BN 14864	1956		2-13-65	x			1	"
" <i>candida</i>	816			2-18-63	x			1	"



SHRUBS AND TREES

Code : Winter and Insect Injury		3: 21 ... 40%		7: 61 ... 80%		9: 81 ... 100%			
1: 0 ... 20%		5: 41 ... 60%							
Species	PI or MS	Other No. : No. :	Date	Deci- Ever- Insect Winter Seed	Injury: Injury: Matur.: Hgt.: Width.				
Salix cinerea	BN 13688-63	860	3-27-63	x	1	1	None	9'	6'
" "	BN 12362-64	1959	2-13-65	x	1	1	"	7'	6'
" cottetii	BN 13604	1963	"	x	3	1	"	3'	4'
" gilgiana	BN 13672-63	815	2-18-63	x	DIED				
" glaucophylloides v. glau.	BN 136773-63	870	3-27-63	x	3	1	"	3'	3'
" "	BN 13666-63	876	"	x	3	1	"	3 1/2'	3 1/2'
" "	BN 13666-63	881	"	x	3	1	"	3 1/2'	3 1/2'
" gracilis textoris	BN 13662-63	878	"	x	3	1	"	7'	7'
" hastata	BN 13679-63	863	"	x	3	1	"	4 1/2'	5'
" incana	BN 13697-63	854	"	x	3	1	"	4'	3'
" interior	BN 13671-63	880	"	x	1	1	"	6'	3'
" irrorata	BN 13684-63	817	2-18-63	x	DIED				
" "	BN 13684-63	847	"	x	3	1	"	4'	4'
" medemii	BN 13663-63	866	3-27-63	x	3	1	"	6'	3'
" muscina	BN 14878-64	1959	3-13-65	x	3	1	"	9'	6'
" oxica	BN 13667-63	875	3-27-63	x	1	1	"	9'	6'
" purpurea	BN 13696-63	850	"	x	1	1	"	10'	7'
" "	BN 13690-63	858	"	x	3	1	"	8'	8'
" "	BN 13680-63	859	"	x	1	1	"	9'	9'
" "	BN 13677-63	877	"	x	3	1	"	4'	4'
" "	BN 13669-63	882	"	x	1	1	"	7'	6'
" "	PI 266477	1972	2-13-65	x	1	1	"	6 1/2'	7'
" gracilis	NY 2936	505	4-17-62	x	3	1	"	3'	3'
" "	Mich 388	820	2-28-63	x	3	1	"	5'	4'
" "	BN 13675-63	868	3-27-63	x	DIED				
" lambertiana	Mich 389	822	2-28-63	x	3	1	"	7'	6'
" nana	BN 8950	504	4-17-62	x	DIED				
" sericea	BN 13560-60	899	4-1-63	x	1	1	"	2 1/2'	2 1/2'
" repens v. rosmarinifolia	PI 265667	843	3-11-63	x	1	1	"	5'	5'





SHRUBS AND TREES

Code: Winter and Insect Injury		3: 21 ... 40%		7: 61 ... 80%		9: 81 ... 100%			
1: 0 .. 20%		5: 41 ... 60%							
Species	PI or Other No. : No. : Planted:	MS	Date	Deci-:ious:	Ever-:green:	Insect Injury:	Winter Injury:	Seed Matur.:	Plnt Hgt.:Wdth:
Salix sericeana	BN 13686-63	861	3-27-73	x		1	1	None	9' 6"
" smithiana	BN 13693-63	849	"	x		3	1	"	4' 4"
" syrticola	BN 14862-64	1954	2-13-65	x		3	1	"	5' 2"
" tominii	BN 13681-63	848	3-27-63	x		3	3	"	4' 2"
" viminalis	BN 13683-63	856	"	x	DIED				
" x chrysostala	PI 265663	842	3-11-63	x		7	1	"	7' 5"
" x molissima	BN 13691-63	886	3-27-63	x		3	1	"	7' 5"
" x multinervis	BN 13559-62	898	4-1-63	x		3	1	"	1 1/2' 1 1/2'
Sasa pygmaea, Bamboo	PI 52674	838	3-7-63	x	x				1 1/2' 1"
" "	839		"		x				6"
Unidentified Shrub (Sullivan)	2935	1968	DIED						
Viburnum x rhytidophylloides	PI 316675	3256	4-23-70	x		1	1	None	18"
" lantana	PI 316675	3219	"	x		1	1	"	18"
" "	PI 316679	3257	"	x		1	1	"	2'
" dilatatum x lobophyllum	PI 316676	3258	"	x		1	1	"	1'
" sargentii	PI 316681	3259	"	x		1	1	"	1'
Wistaria sp.,	2453	11-17-66	DISCARDED						



PART II -

Progress Reports on Projects

1. Eleven accessions of daylilies, Hemoracallis spp., were being compared for density of ground cover, beauty of blossom, rate of spread, vigor, etc., MS 2165, which has been established in an increase production field, still appears to be best. It seems to produce slightly more blossoms and somewhat denser stand than any of the other daylilies. Ratings follow:

MS No.	Date :Planted:	Stand :Rating:	Leaf :Production:	Ability :To Spread:	Winter :Injury:	Plant :Height:
2586	67	5	3	5	1	2½'
2164	65	1	3	3	1	3'
2165	65	1	1	3	1	3'
2177	65	1	1	3	1	3½'
2178	65	1	1	3	1	2½'
2338	66	1	3	3	1	2½'
2339	66	1	3	3	1	2½'
2438	66	3	3	3	1	2½'
2439	67	1	3	3	1	2½'
2562	67	1	3	3	1	2½'
2570	67	3	3	3	1	3'

2. Panicum hemitomon, Maidencane

Two separate tests were being carried out on maidencane.

- a. Eight accessions were being evaluated for rate of spread, height, density of stand, and other characteristics to be considered in streambank or reservoir levee erosion control. MS 2138, which had been previously selected, still looks best. They are evaluated as follows:

MS No.	Date :Planted:	Stand :Rating:	Leaf :Production:	Ability :To Spread:	Winter :Injury:	Plant :Height:
525	62	1	1	3	1	3'
2138	64	1	1	1	1	3'
2139	64	1	3	1	1	32"
2390	66	1	5	3	1	26"
2449	66	1	5	1	1	12"
2589	67	1	1	1	1	3'
2642	67	1	5	5	1	20"
2908	68	1	3	3	1	30"



2. Panicum hemitomor, continued:

MS 2138 produces a very dense stand and remains green longer in the fall than do most of the other accessions.

- b. A test to determine (1) the best month(s) to plant and (2) whether shipping is detrimental to maidencane was continued in 1970. Plantings were to be made for 24 consecutive months, but bad weather prevented plantings from being made for three months during this period.

Rhizomes were dug each month. Some were planted immediately and others were packaged as for shipment and stored in the warehouse. Plantings were made from this stored material after 24 hours and again after 48 hours. The following data was recorded:

- (1) Initial survival
- (2) Percent ground cover one year after planting
- (3) Width of spread one year after planting.

The test is not yet complete. There appears to be very little difference in survival, spread, etc., whether material is planted immediately or held for 24 or 48 hours. Weather in January, February, and March 1970 was such that the material was not planted. All material planted in October, November, and December, 1969, had very poor survival.

3. A three-year test designed to determine the best depth and month(s) to plant five species of plants was continued in 1970. One hundred seeds were planted monthly at 0",  $\frac{1}{4}$ ",  $\frac{1}{2}$ ", 1" and  $1\frac{1}{2}$ " depths. The test is not yet complete but certain observations are shown below:

a. Echinochloa holubii, Limpopograss, MS 924

Generally germination at the  $1/4$ " to  $1/2$ " depth has been best. Survival has been rather constant at all depths of planting but is quite poor from plantings made between October and April.



- b. Lespedeza virgata, Spreading lespedeza, MS 126

Germination has been better at the 0", 1/4" and 1/2" planting depths. Survival has been rather constant at all depths. Germination by months has been quite erratic.

- c. Panicum virgatum, Pangburn switchgrass, MS 155

Germination has been best at the 1/4", 1/2" and 1" depths but has been variable. Survival at various depths of planting has likewise varied considerably.

- d. Paspalum notatum, Wilmington bahiagrass, MS 131

Germination was best at the 1/2", 1", and 1 1/2" planting depths. Survival generally has been poor at all depths, especially at the 0" and 1/4" ones.

4. Two species of plants, Spartina patens, MS 2360, and Phalaris arundinacea, MS 540, were planted vegetatively in rows grading from 6" above water to a 6" depth of water. This was done to determine whether there would be an increase in seed production at some point along the row. Both plantings were destroyed in 1970 as seed production was consistently very poor along the entire row.
5. Eight accessions of fescue were planted in 5' x 20' blocks in October 1957. These have been compared for their ability to form sod and for summer growth. They are listed below in order, most to least promising:

Festuca arundinacea:

<u>Variety</u>	<u>MS No.</u>
KY 31	1601
Artrens	539
Goar	2656
Arflag	538
Alta	2658
Uruguay	2329
Fawn	2657
Kenwell	2659





6. Four accessions of Lespedeza japonica, MS Nos. 1643, 1850, 2503, and 2536 have been clipped twice annually for two years. This clipping regime was initiated to determine whether any of the plants (1) would spread and produce more and finer stems, suitable for hay, and (2) could withstand the clipping. None of the four appear to hold much promise.
7. Four species of plants were planted in a stream channel near Coffeeville in 1966 to test their potential as streambank erosion control plants. All four have remained and have shown some merit. Listed below are the plants and some general notes about each:
  - a. Echinochloa holubii, Limpopograss, MS 924  

A good stand still persists and it is spreading, though not too fast (about a  $2\frac{1}{2}'$  spread). Silt is building up behind grass but washing is occurring between the grass and water.
  - b. Panicum hemitomon, Maidencane, MS 2138  

A good stand persists and plants have spread to a 5 - 6' width. Sloughing soil, together with native plants, are coming in behind. This is the best looking plant on this particular site.
  - c. Salix hastata, Halberd willow, MS 863  

A good stand still persists and silt has built up within it. Sloughing soil catches behind plants and native plants are coming in there.
  - d. Salix interior, Sandbar willow, MS 880  

A good stand remains though it is not as dense as that of Halberd willow. Individual plants are taller than Halberd willows. Again, sloughing soil is being trapped behind plants and natives are invading the area.
8. Seven accessions of Paspalum distichum, knotgrass, and three accessions of Paspalum vaginatum, seashore paspalum, were planted in 5' x 20' plots in 1970. These plants are being evaluated for possible use as streambank or reservoir levee control plants.



The following are the principal characteristics being compared:

- a. Rate of spread,
- b. Density of stand
- c. Seed production; specifically, the amount which can be mechanically harvested.
- d. Disease and insect resistance.



PART II - Plant and Seed Increases

Species	MS :No.	PI or :Other No:	Amount Seed(lbs):	Planned Plants(ea):	Area in Production:	Amount Seed(lbs):	Harvested Plants(ea):	Purpose of Increase
<u>Agropyron obtusiusculum</u> Wheatgrass	387	PI 261099	10		200' row	0	16, 19	
<u>Ampelopsis brevipedunculata</u> <u>Amur ampelopsis</u>	2665	NC 67-114		2,500	600' row		5,570	22, 5
<u>Arachis monticola</u> Reseeding peanut	528	PI 263393	500		1/4 acre	95		20, 12
<u>Castanea molissima</u> Chinese chestnut	24	R3 T21		300	134' row		360	12, 22
<u>Cercis canadensis</u> Redbud	3179			2,000	600' row		70	22
<u>Coreopsis sp.</u>	2378		8 oz.		1 rod row	Pkt		22
<u>Cynodon dactylon</u> Tifdwarf bermudagrass	2371	AM 1283		2,700	sq.ft.		378 sq.ft.	10, 11, 4
<u>Cynodon dactylon</u> Tufcote bermudagrass	2372	BN 1198		2,700	sq.ft.		6,750 sq.ft.	10, 11, 4
<u>Echinochloa frumentacea</u> Chiwapa millet	181	BN 8963	1,500		3 acres	3,850		12
<u>Elaeagnus umbellata</u> <u>Autumn Olive</u>	1430	BN 11387		500	150' row		88	3, 12, 22



## PART II - Plant and Seed Increases

Species	MS No.	PI or Other No.	Amount Planned Seed(lbs):Plants(ea)	Area in Production:Seed(lbs):Plants(ea)	Amount Harvested Seed(lbs):Plants(ea)	Purpose of Increase
<u>Elaeagnus umbellata</u> <u>Autumn olive</u>	429	BN 11385	500	150' row	6	3, 12, 22
<u>Elaeagnus umbellata</u> <u>Autumn olive</u>	432	BN 12090	2,000	900' row	610	3, 12, 22
<u>Eragrostis curvula</u> <u>Lovegrass</u>	268	PI 234558	1,000	10 acres	930	1, 2, 4, 6
<u>Leucaena retusa</u>	2954	PMT 1387	100	75' row	225	12
<u>Libocedrus decurrens</u> <u>California incense cedar</u>	3168		12	3' row	10	22
<u>Lonicera maackii</u> <u>Amur honeysuckle</u>	2161	BN 8313	3,000	650' row	650	12, 22
<u>Malus hupehensis</u> <u>Crabapple</u>	150	PI 122586	5,000	900' row	8,850	12, 22
<u>Panicum virgatum</u> <u>Switchgrass</u>	17	F-686	2	100' row	3 oz.	6, 16, 17
<u>Panicum virgatum</u> <u>Switchgrass</u>	18	F-687	2	100' row	2 oz.	6, 16, 17
<u>Panicum virgatum</u> <u>Pangburn switchgrass</u>	155	BN 14668	300	3 acres	295	6, 16, 17





## PART II - Plant and Seed Increases

Species	MS No.	PI or Other No.	Amount Seed(lbs):Plants(ea)	Planned Production:Seed(lbs):Plants(ea)	Area in 2 acres	Amount Harvested Seed(lbs):Plants(ea)	Purpose of Increase
<u>Panicum texanum</u> Texas millet	358	F 639	400	115,000	2 acres	600	12
<u>Panicum hemitomon</u> Maidencane	2138	NC 64-4			1/2 Acre	29,200	5, 7
<u>Paspalum notatum</u> Wilmington bahiagrass	131	AM 1284	4,000		25 acres	1,025	4, 18, 4
<u>Phyllostachys bissetti</u> Bisset bamboo	499	PI 143540		per req.	300' row	1,000	8, 11
<u>Phyllostachys meyerii</u> Meyers bamboo	498	PI 116768		per req.	300' row	1,030	8, 11
<u>Phyllostachys sp.</u> , Hardy bamboo	500	AM 315	"	"	300' row	1,630	8, 11
<u>Pinus ponderosa</u> Ponderosa pine	3169			60	15' row	-	22
<u>Pinus ponderosa</u> Ponderosa pine	3170			25	5'	3	22
<u>Pinus sylvestris</u> Scotch pine	3142			100	24' row	-	22
<u>Pinus sylvestris</u> Scotch pine	3143			75	20' row	-	22
<u>Pinus sylvestris</u> Scotch pine	3144			75	20' row	-	22



## PART II - Plant and Seed Increases

Species	MS No.	PI or Other No:	Amount Planned Seed(lbs):Plants(ea):Production:Seed(lbs):Plants(ea):Increase	Area in row	Amount Harvested	Purpose of
<u>Pinus sylvestris</u> Scotch pine	3145		100	25' row	12	22
<u>Pinus sylvestris</u> Scotch pine	3146		75	20' row	2	22
<u>Pistacia chinensis</u> Chinese pistache	2182	PI 21970	3,000	600' row	1,600	22, 12
<u>Quercus acutissima</u> Sawtooth oak	3163		500	175' row	450	22, 12
<u>Salix hastata</u> Halberd's willow	863	BN 13679	11,000	.2 acre	Quarantined by State Plant Board because of Black Canker	
<u>Salix interior</u> Sandbar willow	880	BN 13671	11,000	.2 acre	Quarantined by State Plant Board because of Black Canker	
<u>Trifolium nigrescens</u> Ball clover	939	PI 206926	1,000	5 acres	600	6, 4
<u>Trifolium vesiculosum</u> Meechee arrowleaf clover	329	PI 233782	2,500	10 acres	3,410	19, 20



## Notes and Special Problems

1. Karmex DL (Diuron) 28% active ingredient was applied at recommended rates on several fields of perennial grasses in March, 1970. These fields had been burned off to remove dead material. A certain amount of ash, plus dead vegetation, remained at the time of application, although rains had removed much of the ash.

Control of crabgrass and other annual grasses was very poor. Possibly the dead vegetation and small amount of ash remaining caused the Karmex to be ineffective.

2. A production field of maidencane, Panicum hemitomon, appeared to suffer rather severe winter injury in 1970. This field is quite sandy. Maidencane growing in a heavy soil showed no such injury.

## Combine Settings for Seed Harvest

### Echinochloa frumentacea Chiwapa japanese millet

Cylinder speed	-	1200 -- 1400 RPM
Cylinder to concave spacing	-	1/4" - 1/2"
Fan valves	-	1/3 open
Adj. chaffer	-	1/2 open
Finishing sieve	-	9/64"

### Glycine ussuriensis Wild reseeding soybean

Cylinder speed	-	960 RPM
Cylinder to concave spacing	-	5/8" - 1/2"
Fan Valves	-	Open
Adj. chaffer	-	1/2 open

### Lespedeza virgata

#### Spreading lespedeza

Cylinder speed	-	1000 - 1200 RPM
Cylinder to concave spacing	-	1/4" - 1/2"
Fan valves	-	1/4 open
Adj. chaffer	-	1/2 open
Finishing sieve	-	9/64"



## Combine Settings for Seed Harvest - continued

### Panicum texanum

#### Texas millet

Cylinder speed	-	1200 -- 1400 RPM
Cylinder to concave spacing	-	1/4" - 1/2"
Fan valves	-	1/3 open
Adj. chaffer	-	1/2 open
Finishing sieve	-	5/32"

### Panicum virgatum

#### Switchgrass

Cylinder speed	-	1200 -- 1400 RPM
Cylinder to concave spacing	-	3/8" -- 1/2"
Fan valves	-	1/4 open
Adj. chaffer	-	1/4 to 3/8 open
Finishing sieve	-	9/64"

### Paspalum notatum

#### Wilmington bahiagrass

Cylinder speed	-	1200 -- 1600 RPM
Cylinder to concave spacing	-	3/16" - 1/4"
Fan valves	-	1/4 open
Adj. chaffer	-	1/2 open
Finishing sieve	-	9/64"

### Trifolium vesiculosum

#### Meechee arrowleaf clover

Cylinder speed	-	1200 -- 1600 RPM
Cylinder to concave spacing	-	1/4" - 1/2"
Fan valves	-	1/3 open
Adj. chaffer	-	1/2 open
Finishing sieve	-	7/64"







